## THE BIRDS OF FORT SISSETON, SOUTH DAKOTA, A SIXTY YEAR COMPARISON

## BY WM. YOUNGWORTH

The location of old Fort Sisseton is in Marshall County, in the extreme northeastern corner of South Dakota. The old fort buildings are being restored at the present time by workers from a Federal Transient Camp and the fort area will then become a state park. It was here that Dr. Charles E. McChesney spent the years from 1875 to 1878 as acting assistant surgeon, and it was in this region that he studied ornithology.

In his publication, "Notes on the Birds of Fort Sisseton. Dakota Territory" (1879), he mentions that he often traveled fifteen to twenty miles or more, in different directions from the post. In his letter of transmittal, of the above mentioned paper, to the United States Geological Survey, Dr. McChesney says the following of the above mentioned areas which he traveled over: "In many respects, the region differs from any other part of the Northwest. The 'Coteau des Prairies' eonsists of an extensive plateau, rising, somewhat abruptly, nearly four hundred feet above the level of the surrounding country, having a length of over one hundred miles, and a variable width of from twenty to forty miles. Upon this elevated plateau are many lakes, which are the annual resort of thousands of waders and wild fowl, and the region differs greatly in its fauna from that of the lower country."

There have been many interesting changes in the bird life of this region. Settlement of the country has caused extermination of some species and a definite increase in certain other species. The writer will discuss briefly the status of some of these species in the annotations. The statements are based on observations made from five trips to the region. The first trip was during June, 1929; following trips were made in July, 1929, June, 1930, June, 1931, and June, 1935.

Again referring to Dr. McChesney's letter of transmittal, it must also be stated that when he included three western forms of grouse, he did not indicate that the birds had ever been observed at Fort Sisseton. Dr. McChesney merely included the Dusky Grouse, Sage Grouse, and Rocky Mountain Ruffed Grouse for the benefit of army officers in western Dakota and Montana, who were interested in bird life and desired a description of the birds.

The writer is greatly indebted to Mr. W. F. Kubichek of the United States Bureau of Biological Survey, Washington, D. C., for permission to use some of his records in this paper. Furthermore, this work could not have been completed without the generous aid of Mr. Arthur Lundquist, pathologist at Peabody Hospital, Webster, South Dakota. Dr. T. C. Stephens of Morningside College, Sioux City, Iowa, and Mr. Chas. J. Spiker, formerly of the National Park Service, Washington, D. C.

Mr. Lundquist is a veteran field man and has entered the bird banding field in a wholesale manner. He has probably banded more immature Double-crested Cormorants than any other individual bander in the United States. There is an account of his work in the WILSON BULLETIN for December, 1932.

This list of birds is not presented as a complete catalogue, for a list of a given region ean never be fully complete, but it is merely an effort to bridge the gap of some sixty years of time and to show some of the changes that have occurred. Binomial nomenclature is used wherever possible. The asterisk (\*) is used to denote species found by Dr. McChesney, numbering 154 forms. Seventy-seven additional species have been added to Dr. McChesney's list, bringing the total to 231 species. Species which we consider as summer residents in this region are denoted by the symbol °, after the asterisk.

COMMON LOON. *Gavia immer.*\* Dr. MeChesney reported great numbers of loons, but at present the loon is an uncommon migrant.

HOLBOELL'S GREBE. Colymbus grisegena holboelli.<sup>o</sup> This large grebe is a common summer resident on the various lakes on the Coteau and was evidently overlooked by McChesney. The hoarse cries of this bird are characteristic of the rush-filled sloughs of the region.

HORNED GREBE. Colymbus auritus.<sup>o</sup> This bird is not found as a eommon species and has not been seen in numbers. Indications are that it breeds sparingly in the Rush Lake region. It was not listed by Dr. MeChesney.

EARED GREBE. Colymbus nigricollis californicus.<sup>o</sup> The Eared Grebe is a very common summer bird and often many colonies of several hundred birds each were found breeding on Rush Lake. Mr. Kubiehek has worked in such colonies and reports nests seattered everywhere. This is another species not mentioned by McChesney.

WESTERN GREBE. Aechmophorus occidentalis.\*• A beautiful bird when seen in its natural surroundings and while mentioned in 1878 as occasional in migration, it is today found by hundreds on Rush Lake and other lakes of the region. Mr. Kubichek has perhaps made a more thorough study of this species than any other ornithologist of the day. and he thinks that the species is holding its own in the area under consideration.

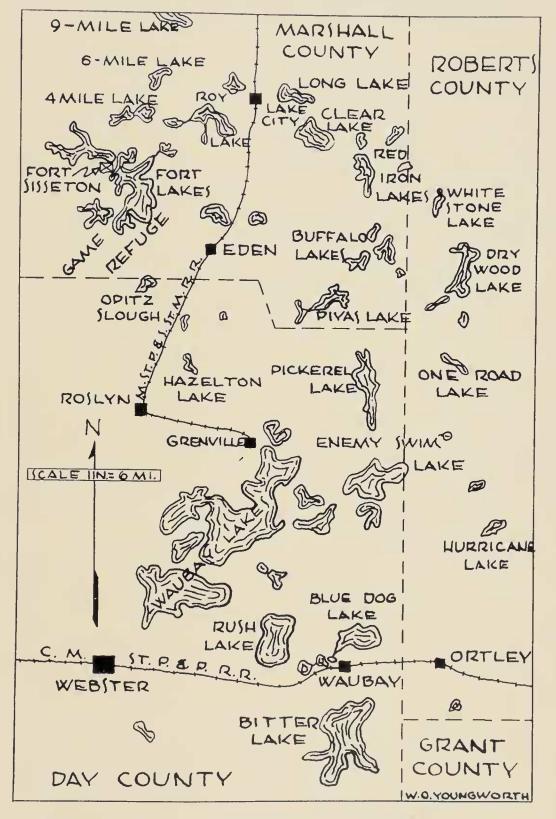


FIG. 22. The lakes of the Fort Sisseton country, in Marshall, Day, and Roberts Counties.

PIED-BILLED GREBE. *Podilymbus podiceps.*\*° A very common bird over the entire Coteau today, as in the early days.

WHITE PELICAN. *Pelecanus erythrorhynchos.*\* A regular migrant on the larger lakes, but it is not a breeding bird, although in some years pelicans stay throughout the summer on the Waubay Lakes.

DOUBLE-CRESTED CORMORANT. *Phalacrocorax auritus.*\*° This big bird is still a common breeder despite constant shooting, and fine colonies nest on islands in South Waubay and Cattail Lakes. A large colony was recently destroyed on Roy Lake, not far from the old fort.

GREAT BLUE HERON. Ardea herodias.\* A regular migrant, and it probably breeds in small numbers in this area.

AMERICAN EGRET. Casmerodius albus egretta. A single bird was taken by Mr. Kubichek in 1929, and was the first authentic record for the state of South Dakota. Details of this record have been published in *Iowa Bird Life* for September, 1929.

GREEN HERON. Butorides virescens.\*• Not any more common than in the days of McChesney's travels.

BLACK-CROWNED NIGHT HERON. Nycticorax nycticorax hoactli.\*° Dr. McChesney did not locate a breeding colony of this species. Today. a large colony of birds nest on a wooded island in Rush Lake and are usually bothered by a family or two of Crows.

AMERICAN BITTERN. *Botaurus lentiginosus.*\*° Still found as a regular summer resident in suitable habitat.

LEAST BITTERN. *Ixobrychus exilis exilis.*<sup>o</sup> This tiny bittern was not found by McChesney and although it has been found breeding on the Coteau, it is not a very common bird. On June 6, 1931, a pair of Least Bitterns were observed at their nest on Rush Lake.

WHISTLING SWAN. Cygnus columbianus. Mr. Lundquist reported to me, that he sees small flocks of these fine birds nearly every year on the larger lakes.

TRUMPETER SWAN. *Cygnus buccinator.*\* The Trumpeter Swan is almost a bird of the past and is not now found in the Sisseton country, as it was in the days of Dr. McChesney.

CANADA GOOSE. Branta canadensis.\* This goose passes through in large numbers, but the flocks are probably concentrated to a large extent. and it appears to the observer that the birds are not decreasing in numbers, yet we know that the number of geese is sadly depleted. Mr. Kubichek has taken specimens of the intermediate or Lesser Canada Goose.

WHITE-FRONTED GOOSE. Anser albifrons albifrons. Not mentioned by McChesney. This goose is a regular migrant, but not as common as the other forms.

SNOW GOOSE. Chen hyperborea hyperborea.\* A common migrant in the spring and is often found resting near the larger lakes for some days at a time.

BLUE GOOSE. *Chen caerulescens.*\* Probably more common than the Lesser Snow Goose and usually associated with that species while passing through this territory.

MALLARD. Anas platyrhynchos platyrhynchos.\*° The Mallard is a breeding bird and fairly large flights still occur in the fall of the year.

BLACK DUCK. Anas rubripes. This duck was not seen by Dr. McChesney. Mr. Lundquist says that a few Black Ducks are shot by hunters nearly every fall.

GADWALL. *Chaulelasmus streperus.*\*° The Gadwall is still a breeding bird and a regular migrant through the Coteau des Prairies.

BALDPATE. *Mareca americana*.\*° This species is a fall and spring migrant and some of the late birds still nest in this area.

PINTAIL. *Dafila acuta tzitzihoa.*\*° The Pintail is still considered a summer resident and quite a few are taken each fall by hunters.

GREEN-WINGED TEAL. Nettion carolinense.\*• A beautiful little fowl, which is still a regular migrant, but a rather uncommon summer breeder. A pair of these birds was found at Bitter Lake on June 7, 1929.

BLUE-WINGED TEAL. Querquedula discors.\*° The little blue-wing is one of the common nesting ducks found on the Coteau and many pleasant hours have been spent in watching this species during nidification.

CINNAMON TEAL. Querquedula cyanoptera. Mr. Lundquist writes that one or two have been shot by hunters since he has been hunting at Opitz Slough.

SHOVELLER. *Spatula clypeata*.\*° The Spoon-bill is still found as a regular summer resident near Fort Sisseton.

WOOD DUCK. *Aix sponsa.*\* Dr. McChesney reports a single specimen of this species. Hunters still take an occasional Wood Duck. but doubtless the birds are shot by mistake.

REDHEAD. Nyroca americana.\*° Not an uncommon breeding bird and a regular migrant. RING-NECKED DUCK. Nyroca collaris.<sup>o</sup> This species was not distinguished by Dr. McChesney. A regular migrant and possibly a few remain to breed, as birds have been seen in June.

CANVAS-BACK. Nyroca valisineria.<sup>\*°</sup> Not as common as the Redhead and only a few birds remain to breed. A nice nest was found in 1931 by Mr. Kubichek.

SCAUP DUCK. Nyroca marila.\* Dr. McChesney found this duck in some numbers during the fall migration.

LESSER SCAUP DUCK. Nyroca affinis.\*° This species is a regular migrant and a few remain to breed.

GOLDEN-EYE. Glaucionetta clangula americana.\*• Were found in the past in some numbers, this is hardly true today on the Coteau. Mr. Lundquist found the species breeding at Rush Lake during June, 1930. Two pairs were seen at Spring Lake on June 6, 1935, by the author.

BARROW'S GOLDEN-EYE. *Glaucionetta islandica*.\* Dr. McChesney reports a few specimens during the spring migration. There are no recent records of the species from this region.

BUFFLE-HEAD. *Charitonetta albeola.*\* The little Spirit Duek is not as eommon during migration, as it was back in 1878. Protection might restore it to some extent and preserve the speeies for a few ycars more.

OLD-SQUAW. *Clangula hyemalis*. A rare migrant in the Fort Sisseton eountry. Mr. Lundquist has taken this species during the hunting season.

WHITE-WINGED SCOTER. *Melanitta deglandi*. The scoters were not reported by Dr. MeChesney. This species is not rare and some are shot nearly every fall.

SURF SCOTER. *Melanitta perspicullata*. This species is not seen as often as the preceding species and is usually found on the more open lakes.

RUDDY DUCK. Erismatura jamaicensis rubida.\*° Dr. McChesney found this duek as rare, while recently we have found it as common and a regular breeding bird over the whole region..

HOODED MERGANSER. Lophodytes cucultatus.\* Still found as a migrant, eonsidered almost common in some years.

AMERICAN MERGANSER. Mergus merganser americanus.\* This large duek is also a regular migrant throughout the Sisseton country.

TURKEY VULTURE. Cathartes aura septentrionalis.\* Reported by McChesney as a common breeding bird. The vulture is not common any more, and only one bird was reported in 1931 by Mr. Lundquist.



Fig. 23. Old Fort Sisseton, looking across the parade ground to the officers' quarters.



FIG. 24. Ruins of the powder house at Fort Sisseton.

SWALLOW-TAILED KITE. *Elanoides forficatus forficatus.*\* This beautiful hawk was not rare in the early days about Fort Sisseton. Today, it has disappeared from the entire northwest and is another of the vanishing species.

GOSHAWK. Astur atricapillus. The Goshawk was not mentioned by McChesney in his report. Mr. Lundquist reports that during certain fall seasons this hawk is a very common species.

SHARP-SHINNED HAWK. Accipiter velox velox.\*° This small hawk was found as a summer resident in 1878 and is still not uncommon around the old fort.

COOPER'S HAWK. Accipiter cooperi.\*° The Cooper's Hawk is one of the medium sized hawks which is apparently still holding its own in this part of the country.

RED-TAILED HAWK. Buteo borealis.\*° The four forms of the Red-tailed Hawk still pass through this region, but hardly in the numbers that they must have mustered back in the cavalry days of the West.

BROAD-WINGED HAWK. Buteo platypterus platypterus. This small buteo was not reported by Dr. McChesney. It is now found as a rare summer visitor.

SWAINSON'S HAWK. Buteo swainsoni.\*° In the old days of vast undisturbed prairies, the Swainson's Buzzard was a very common breeding bird. Now it is confined largely to the Missouri River region and is uncommon around Fort Sisseton.

AMERICAN ROUGH-LEGGED HAWK. Buteo lagopus s. johannis. The rough-legs were not found by McChesney during his stay. At the present time the rough-leg is a regular migrant and there are a number of mounted birds in the city of Webster.

FERRUGINOUS ROUGH-LEG. Buteo regalis. This species is not common like the former species.

GOLDEN EAGLE. Aquila chrysaëtos canadensis.\* The Golden Eagle is a regular migrant at Fort Sisseton. Mr. Lundquist says that this eagle is not uncommon in some falls.

BALD EAGLE. *Haliaeetus leucocephalus.*\* This species also is found as a migrant, but not as often as the Golden Eagle.

MARSH HAWK. *Circus hudsonius.*\* The Marsh Harrier is of course the most common of the summer hawks, as it was in the days of Dr. McChesney.

OSPREY. Pandion haliaëtus carolinensis. A very uncommon migrant.

DUCK HAWK. Falco peregrinus.\* Dr. McChesney says that a few of these hawks stayed during the summer. The writer saw one on June 5, 1931, which was having a thrilling aerial battle with a male Marsh Hawk.

PIGEON HAWK. Falco columbarius.\* This small falcon is still a regular migrant. To date it has not been found breeding on the Coteau.

SPARROW HAWK. *Falco sparverius*.\*<sup>o</sup> The Sparrow Hawk is one of the small hawks, which has not decreased in numbers and is common during the summer season.

PRAIRIE CHICKEN. Tympanuchus cupido americanus.\* $^{\circ}$  The Prairic Hen nests on the Coteau in diminished numbers and will probably be crowded out by over-pasturing of land, rather than by more direct human contacts.

SHARP-TAILED GROUSE. *Pedioecetes phasianellus.*\*° This light colored grouse is still found in very small numbers in the Fort Sisseton country.

EUROPEAN PARTRIDGE. *Perdix Perdix.*<sup>o</sup> This fine game bird has been introduced to the Coteau in recent years and is spreading rapidly everywhere. The writer believes that this bird and the Ring-necked Pheasant will in time crowd out the native Prairie Hen and Prairie Sharp-tailed Grouse.

BOB-WHITE. Colinus virginianus virginianus.<sup>o</sup> Quail apparently had not reached the Fort Sisseton region when Dr. McChesney was there, but at present arc found in small numbers in various wooded areas.

RING-NECKED PHEASANT. *Phasianus colchicus torquatus.*° A foreign bird which is becoming very common.

WHOOPING CRANE. Grus americana.\* A fine bird, which is nearly extinct. There have been no recent reports from the region of this species, which was not considered common even back fifty years ago.

SANDHILL CRANE. *Grus canadensis.*\* The Sandhill Crane formerly bred on the Coteau, but at the present time it is an uncommon bird even as a migrant.

VIRGINIA RAIL. Rallus limicola limicola.<sup>o</sup> This species, which was not seen by Dr. McChesney, is not an uncommon summer resident and the nest has been found on the Coteau by Mr. Kubichek.

SORA. *Porzana carolina.*\*° An interesting little bird, which breeds in this region and is best studied from a blind.

FLORIDA GALLINULE. Gallinula chloropus cachinnans.<sup>o</sup> The gallinule is a bird of the rush-filled lakes and was not listed by McChesncy. It is a bird which is definitely in the class of skulkers and keeps close to cover in most cases. AMERICAN COOT. Fulica americana americana.\*° The eoot is one of the most common of the summer birds and is found in all the sloughs and pot-holes.

PIPING PLOVER. *Charadrius melodus.*<sup>o</sup> The sweet voieed little piper was not found in 1878, but now the bird is a regular summer resident along some of the more open prairie lakes.

SEMIPALMATED PLOVER. *Charadrius semipalmatus.*\* This plover is a regular migrant now as it was in the early days. It oeeurs both in the spring and fall.

KILLDEER. Oxyechus vociferus vociferus.\*° The Killdeer is one of the plovers which has not been decreased in numbers by the settling up of the land, and is apparently as common as it was sixty years ago.

GOLDEN PLOVER. *Pluvialis dominica dominica.*\* Dr. McChesney gives a fine account of the wonderful flights of plovers, both spring and fall, in which flocks of thousands were constantly flying over. Such flights of Golden Plovers are, of course, only a memory and now one is indeed a fortunate ornithologist who sccs a flock of a few hundred birds.

BLACK-BELLIED PLOVER. Squatarola squatarola.\* Dr. McChesney states that he did not find this plover during the spring migration; however, it does eome through in the spring and existing records would point to its abundance then, rather than in the fall. At this writing, however, the Black-bellied Plover is not a common migrant in any sense of the word.

RUDDY TURNSTONE. Arenaria interpres morinella.\* The attraetively marked Turnstone is a regular migrant as it was in former times and one is often privileged to see hundreds of the birds feeding in fields of sprouting corn. Smaller floeks are also found along the gravel beaches.

AMERICAN WOODCOCK. *Philohela minor.*\* During 1877 and 1878 a few woodcocks were shot near the fort, but in recent years, according to Mr. Lundquist, this bird has not been found by hunters.

WILSON'S SNIPE. *Capella delicata*.\* The snipe is a regular migrant and a few possibly remain to breed as they did years ago.

LONG-BILLED CURLEW. *Numenius americanus.*\* This splendid bird. once eommon over the Great Plains, has left the Fort Sisseton country and has not been reported even as a migrant for many years.

HUDSONIAN CURLEW. *Phaeopus hudsonicus.*\* Dr. MeChesney did not find this bird at Fort Sisseton. although he gives it in his list. No definite reports of the bird are fortheoming in recent years.



FIG. 25. Rush Lake, home of the Western Grebe.



Fig. 26. Bitter Lake. Along this shore line nested the Marbled Godwit, Upland Plover, Willet, and Piping Plover.

ESKIMO CURLEW. *Phaeopus borealis.*\* Another of the vanishing species which was once so common on the Coteau during migration. Not reported for many years.

UPLAND PLOVER. Bartramia longicauda.\*° A fine game bird, which was formerly most abundant around Fort Sisseton during the summer time. At present the bird is found in limited numbers and present day observers believe that while this valuable bird is slowly increasing in numbers, it can never return to its former status.

SPOTTED SANDPIPER. Actitis macularia.\*° The Spotted Sandpiper has not decreased in numbers and is found as a common summer resident. Nests can usually be found on the islands in Waubay Lake.

SOLITARY SANDPIPER. *Tringa solitaria*. This common migrating species was overlooked by MeChesney and is today found in both spring and fall.

WILLET. Catoptrophorus semipalmatus.\*• A very interesting wader, which seems to be gradually losing out as a summer resident of the Coteau. Three or four years ago the Willet was found breeding in quite a few places, but last year it seemed to be nearly absent.

GREATER YELLOW-LEGS. *Totanus melanoleucus.*\* The Greater Tattler is not a common migrant and is slowly losing out like all of the larger shore birds.

LESSER YELLOW-LEGS. *Totanus flavipes.*\* Dr. McChesney states that this bird bred in the vieinity, which is hardly the case at this writing. The yellow-legs is, however, one of the most common of all the migrating shore-birds.

PECTORAL SANDPIPER. *Pisobia melanotos.*\* A medium sized wader, which has not suffered greatly from hunters and which still eontinues to pass to and fro through the prairie region.

WHITE-RUMPED SANDPIPER. *Pisobia fuscicollis.*\* One of the small peeps, which are so common during migration time.

BAIRD'S SANDPIPER. *Pisobia bairdi*.\* This sandpiper is a regular migrant over the Coteau. An interesting observation was made by Professor Kubiehek in that the Baird's Sandpiper seems to migrate earlier than the other species and is often found while the geese are still migrating north.

LEAST SANDPIPER. Pisobia minutilla.\* A regular migrant.

RED-BACKED SANDPIPER. *Pelidna alpina sakhalina*. This well marked bird was missed by Dr. McChesney and is today found as a regular migrant. During the first week of June, 1930. several small floeks of this sandpiper were seen near Rush Lake and some were taken.

DOWITCHER. Limnodronus griseus.\* Formerly a common migrant and eonsidered a fine table bird by Dr. McChesney. Now the bird is an uneommon migrant and is not the most familiar of the waders as it was in the days of yore.

STILT SANDPIPER. *Micropalania himantopus*. A well known species, which was not found by McChesney. At times found as one of the commoner waders. On June 5, 1930, a flock of about 500 Stilt Sandpipers were seen on the west shore of Rush Lake.

SEMIPALMATED SANDPIPER. *Ereunetes pusillus.*\* Probably without question the most abundant of all migrating sandpipers.

BUFF-BREASTED SANDPIPER. *Tryngites subruficollis.*\* A strange little sandpiper, which was taken by Dr. McChesney in small numbers.

MARBLED GODWIT. Limosa fedoa.\*° Strangely Dr. MeChesney reports this godwit as common and yet not breeding on the Coteau. Professor Kubiehek has found many nests of the bird at various places and at this writing it is found much more frequently than the Willet. These two species suffer heavily from over-pasturing.

HUDSONIAN GODWIT. *Limosa haemastica*.\* Much more common in 1878 than at present, as is the case with all the larger waders. Dr. McChesney said it did not stay to breed.

SANDERLING. *Crocethia alba*. Another of the shore birds which was not listed by Dr. McChesney. The species is not considered rare by Mr. Kubiehek, who has taken birds in various phases of plumage.

AVOCET. *Recurvirostra americana.*\* A truly beautiful bird, which formerly bred near Fort Sisseton. At present exceedingly rare in migration.

WILSON'S PHALAROPE. Steganopus tricolor.\*<sup>o</sup> Wilson's Phalarope nests sparingly on the Coteau, with the bulk of the birds going farther north to pass the nidification period.

NORTHERN PHALAROPE. Lobipes lobatus. This phalarope is a regular migrant at Fort Sisseton, but was not reported by Dr. McChesney. Sometimes flocks of several thousand birds are found in this area in the spring. Such a flock of approximately 4,000 birds was found at Bitter Lake on June 2, 1931.

HERRING GULL. Larus argentatus.\* Dr. McChesney gives this gull as a breeding species and as ecommon. This is not true today and it is now econsidered only as a straggling migrant.

RING-BILLED GULL. Larus delawarensis.<sup>o</sup> This gull was not listed by Dr. MeChesney. Today. a fine nesting eolony of several hundred birds is to be found on the east island in South Waubay Lake and has apparently been there many years. It is possible that it might nest elsewhere in the region in small numbers. FRANKLIN'S GULL. Larus pipixcan.\*° A trim appearing gull, with a lovely rose blush on the underparts, which often nests on certain rush-filled lakes in countless thousands. Conditions must be right, however, or the birds do not nest. Some years thousands of unmated birds may stay around all summer and feed on insects in the nearby fields. Franklin's Gull is one of the many reasons why the Fort Sisseton country is a bird student's paradise.

LAUGHING GULL. *Larus atricilla.*\* Dr. MeChesney lists this gull as abundant and breeding, as he also does the Franklin's Gull. There have been no recent records of this species that are substantiated by specimens.

FORSTER'S TERN. *Sterna forsteri*.\*° Forster's Tern is still a regular summer resident, but it is doubtful whether it is as plentiful as it was fifty years ago.

COMMON TERN. Sterna hirundo hirundo.\*° This tern appeared to the writer as the more common of the two species. Niee eolonies are found on Waubay Lake, Hildebrandt's Lake, and Cottonwood Lake. The birds aeted as though they were going to nest on a small island in Roy Lake in June, 1931, and there are probably other small eolonies seattered around on the Cotcau.

BLACK TERN. Chlidonias nigra surinamensis.\*° A eommon summer resident in suitable locations over the entire region.

MOURNING DOVE. Zenaidura macroura.\*° The Mourning Dove ean still be considered a common summer bird on the Coteau, despite' open seasons in many western and southern states.

PASSENGER PIGEON. *Ectopistes migratorius.*\* According to Dr. MeChesney this extinct species was not an especially abundant summer resident about the fort.

YELLOW-BILLED CUCKOO. Coccyzus americanus americanus.° An uneommon summer resident, not mentioned by McChesney.

BLACK-BILLED CUCKOO. *Coccyzus erythropthalmus.*\*° The common breeding form, which is found probably in about the same numbers as previously.

SCREECH OWL. *Otus asio.*<sup>°</sup> The Screech Owl was not reported by Dr. McChesney during his stay. Now the bird is found as a common resident.

GREAT HORNED OWL. Bubo virginianus.\*° The Great Horned Owl is a sorely persecuted bird in any locality. but despite all this the bird is still found on the Coteau.

SNOWY OWL. Nyctea nyctea.\* Reported in small numbers in 1878. In recent years great waves of Snowy Owls have visited the



FIG. 27. Nest of the Western Grebe. The usual elutch of eggs is four, six is rather uncommon.



FIG. 28. Western Grebe nest covered. Usually they do not cover.

Coteau and a great many birds have been killed. Professor Kubiehek has found them in the spring while the wild fowl were migrating.

BURROWING OWL. Spectyto cunicularia hypugaea.<sup>o</sup> It is interesting to know that this curious owl apparently did not breed near the post when McChesney lived there; however, at present this owl lives in the hills north of the fort and is not rare.

LONG-EARED OWL. Asio wilsonianus. Not listed by McChesney, while today it is found as a not uncommon owl.

SHORT-EARED OWL. Asio flammeus flammeus.<sup>o</sup> It is rather surprising that this owl was not seen by McChesney. We now find it as a rather frequent breeding bird in the lowlands.

NIGHTHAWK. Chordeiles minor.\*° A common summer resident over the entire Coteau. The lighter colored race called Sennett's Nighthawk appears to be the most common form.

CHIMNEY SWIFT. *Chaetura pelagica*.<sup>o</sup> This bird is found about the various towns, which now dot the Coteau. Dr. McChesney does not report this species.

RUBY-THROATED HUMMINGBIRD. Archilochus colubris.\*° This species has probably increased somewhat, especially around the towns. where an abundance of flowers attract it.

BELTED KINGFISHER. Megaceryle alcyon.\*• Not a very common bird anywhere on the Coteau. In a later note (Bull. Nutt. Ornith. Club, IV, 1879, p. 188) Dr. McChesney reported a pair of these birds observed near the post on April 14 and 16, 1879.

FLICKER. Colaptes auratus.\*° The Flicker is still found in small numbers about Fort Sisseton and also about the towns in the region. Hybrids between this form and the Red-shafted Flicker have also been seen.

RED-HEADED WOODPECKER. *Melanerpes erythrocephalus.*\*° This bird is a common summer resident.

YELLOW-BELLIED SAPSUCKER. Sphyrapicus varius varius. The sapsucker is a very uncommon migrant.

HAIRY WOODPECKER. Dryobates villosus.<sup>\*°</sup> Dr. McChesney did not think that this species bred in the vicinity at that time. Today, the bird is found as a breeding bird as well as a winter resident.

DOWNY WOODPECKER. Dryobates pubescens.<sup>\*°</sup> Dr. McChesney did not include this bird in his long list, but in a later note (Bull. Nutt. Ornith. Club. IV, 1879, p. 188) he spoke of seeing this species several times in the winter of 1878-79 and collecting a few specimens. The writer has usually found this species nesting in the willow trees in this region.

KINGBIRD. *Tyrannus tryannus*.\*<sup>o</sup> The Kingbird is a very common summer bird. Many nests arc found in low situations. Dr. Stephens has some fine pictures of these birds nesting in a snowberry thicket.

ARKANSAS KINGBIRD. *Tyrannus verticalis.*\* $^{\circ}$  The Western Kingbird is also a common species and seems to get along peaceably with the preceding form. The presence of many planted groves around farm homes and in the towns has led to an increase in the numbers of these two species.

• Рноеве. *Sayornis phoebe*.° The Phoebe is not a common bird anywherc in the region.

YELLOW-BELLIED FLYCATCHER. Empidonax flaviventris. This small, dark-colored flycatcher is not an uncommon spring migrant and birds have been seen at various places on the Coteau. It was not previously reported.

ALDER FLYCATCHER. *Empidonax trailli*.<sup>o</sup> Traill's Flycatcher is probably the most common of the small flycatchers on the Coteau. The writer has found it breeding in brush-land near water and in wild plum thickets on an island in Rush Lake.

LEAST FLYCATCHER. Empidonax minimus.<sup>o</sup> The Least Flycatcher is a regular migrant through the Fort Sisseton country. It remains to breed. The three preceding species were not listed in 1878.

WOOD PEWEE. *Myiochanes virens.*\*° The writer is inclined to think that this species breeds in small numbers, while Dr. McChesney considered it as a migrant. It was found to be not uncommon in the woods near Opitz Slough in June, 1931.

HORNED LARK. Octocoris alpestris.\*° Dr. McChesney seemed to think that the Horned Lark was merely a migrant or winter visitant. The writer has found the bird as a regular breeding bird in recent years. Late broods are not uncommon in June. There are probably several different forms of the Horned Lark visiting this region during the course of the year.

TREE SWALLOW. *Iridoprocne bicolor*.\*° Dr. McChesney found this swallow only during one season; however, the bird is now considered a regular migrant and a not uncommon summer resident. Mr. Kubichek found, on one occasion, an unusual nest in a piece of farm machinery.

BANK SWALLOW. *Riparia riparia riparia.*\*° Still found as a common summer resident in suitable locations.

ROUGH-WINGED SWALLOW. Stelgidop!eryx ruficollis serripenuis.<sup>o</sup> A migrant in this region and a regular summer resident. BARN SWALLOW. *Hirundo erythrogaster*.\*° Dr. McChesney speaks of it as found in small numbers. This bird is now found about nearly every farm in the region. This is another species which has increased in numbers due to settling of the country.

CLIFF SWALLOW. *Petrochelidon albijrons albijrons.*\*° A regular migrant and summer resident.

PURPLE MARTIN. *Progne subis subis.*\*° Another species which has become quite common due to the presence of numerous bird houses and other accessible nesting sites. An interesting sight at old Fort Sisseton is the flock of martins, which nest in the now decaying buildings and fly back and forth over the old parade ground.

BLUE JAY. Cyanocitta cristata cristata.\*° A regular summer resident, and found as not uncommon in winter.

AMERICAN MAGPIE. *Pica pica hudsonia*. A remarkable invasion of magpies occurred during 1921 and 1922 throughout this entire region. Large numbers of the birds were found around Fort Sisseton and some of the birds stayed during the ensuing summer. There were also some reports of the birds nesting, but we have no actual nests or eggs to back up the reports.

RAVEN. Corvus corax.\* The Raven was a rare bird about Fort Sisseton even during Dr. McChesney's stay and is not found in the region today.

CROW. Corvus brachyrhynchos.\*° In 1878 the Crow was considered a rare bird at the post. Today, the bird is a common migrant, but is still an uncommon breeding bird. A pair or two usually nest on the island in Rush Lake and here live and feed their young from the nests of Black-crowned Night Herons. In June, 1931, the writer put an end to their depredations for one year by dispatching the parents and two grown young birds.

BLACK-CAPPED CHICKADEE. *Penthestes atricapillus.*\*° The chickadee is a regular summer resident, and some stay throughout the coldest winter.

WHITE-BREASTED NUTHATCH. Sitta carolinensis carolinensis. Dr. McChesney did not list this species or the following. The common nuthatch is today a regular resident of the region and often a familiar bird around the feeding shelf.

RED-BREASTED NUTHATCH. Sitta canadensis. This small nuthatch is found at times in the fall and early winter about the feeding box in Webster and other towns on the Coteau.

BROWN CREEPER. Certhia familiaris. The Brown Creeper was not listed in 1878. This odd little bird is found as a very common



FIG. 29. Nest of Holboell's Grebe on shore of Rush Lake.



F16. 30. Common Kingbird on nest. In taking this picture the photographer approached on foot till the lens of camera was four feet from bird.

fall and winter resident and its peculiar feeding habits are always a source of interest to one interested in bird life.

HOUSE WREN. *Troglodytes aedon.*\*° The House Wren has also increased greatly in numbers, due to numerous bird houses in both townyards and farmyards. The House Wren has not described its original nesting sites however, and is found in the woods as well.

LONG-BILLED MARSH WREN. Telmatodytes palustris.<sup>o</sup> This wren and the following species are the most interesting of the entire family and were apparently overlooked by Dr. McChesney. The Long-billed Marsh Wren is one of the common birds of the sloughs. The little oval grass nests are found everywhere among the beds of scirpus and the tiny birds with bubbling songs are continually flitting ahead of the observer.

SHORT-BILLED MARSH WREN. *Cistothorus stellaris*.<sup>o</sup> This bird is not nearly as common as the above species, mainly because suitable nesting areas are not available in many places. A damp meadow is the home of this wren, with its characteristic chittering song.

CATBIRD. Dumatella carolinensis.\*° The writer is confident that the Catbird and the Brown Thrasher have increased greatly in numbers since 1878 due to the planting of shrubbery and trees throughout the entire region.

BROWN THRASHER. *Toxostoma rufum.*\*° This bird is often seen about farm homes and along country roads, where trees have been planted.

ROBIN. *Turdus migratorius.*\*° Dr. McChesney found the Robin in small numbers and attributed its scarcity to lack of nesting sites. As a species, the Robin has increased enormously and is today one of the most common summer birds around every farm and in every city and village over the entire "Coteau des Prairies".

HERMIT THRUSH. Hylocichla guttata. An uncommon migrant.

OLIVE-BACKED THRUSH. Hylocichla ustulata swainsoni.\* This thrush was found by Dr. McChesney in small numbers and was also seen by the writer the first week in Junc, 1931.

GRAY-CHEEKED THRUSH. *Hylocichla minima aliciae*. The Graycheeked Thrush is a less common migrant than the Olivc-backed Thrush.

BLUEBIRD. Sialia sialis sialis.\*° The Bluebird is a regular resident on the Cotean and has also joined the ranks of the bird box nesters around farms and towns.

CEDAR WAXWING. Bombycilla cedrorum. The gentle mannered waxwing was not listed by McChesney during his stay. In 1931 the writer saw several flocks of the birds near the Waubay Lakes.

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SHRIKE. Lanius ludovicianus.\*• Dr. McChesney collected a single Shrike in 1877. Now the Shrike is a common bird along any roadside which boasts a few trees or shrubs large enough to nest in.

STARLING. Sturnus vulgaris. Strangely enough the first record of this introduced species in South Dakota came from the Fort Sisseton country. Mr. Lundquist records the first Starling on May 14, 1933, near Lake Minnewashta. Day County. (See Wilson Bulletin for March, 1934).

YELLOW-THROATED VIREO. Lanivireo flavifrons. This rather brightly colored vireo has been found to be a not uncommon summer resident in areas where cottonwood trees are growing.

RED-EYED VIREO. Vireo olivaceus.\*° The Red-eyed Vireo is found regularly on the Coteau. Dr. McChesney collected one bird.

WARBLING VIREO. *Vireo gilvus.*\*° Not rare. Dr. McChesney also eollected one bird of this species.

BLACK AND WHITE WARBLER. *Mniotilta varia*.\* Still found as a regular migrant and the writer feels that careful search will also reveal it as a rare summer resident, as it has been found nesting at Sioux City, Iowa.

TENNESSEE WARBLER. Vermivora peregrina. A very common migrant, not listed by Dr. McChesney. At times it is the most common of migrating warblers.

ORANGE-CROWNED WARBLER. Vermivora celata. A regular migrant, not given by Dr. MeChesney.

PARULA WARBLER. Compsothlypis americana. A rare migrant, which was reported by Mr. Lundquist for the first time in the spring of 1927.

YELLOW WARBLER. Dendroica aestiva.\*° Then as now, one of the common small birds, which remains to breed.

MAGNOLIA WARBLER. *Dendroica magnolia*.\* A migrant, which was found by Dr. McChesney in small numbers and still passes through the region.

CAPE MAY WARBLER. *Dendroica tigrina*. One of the rarer warblers, which was first reported by Mr. Lundquist. A specimen has been taken in the region. A warbler of this species was seen on June 3, 1935, near Spring Lake.

MYRTLE WARBLER. Dendroica coronata.\* Dr. McChesney found this species as a common migrant, as later observers also report it.

BLACKBURNIAN WARBLER. Dendroica fusca.\* This brilliantly colored bird was reported by Dr. McChesney as a spring migrant. CHESTNUT-SIDED WARBLER. *Dendroica peusylvanica.*\* Also listed in the early days. An uncommon migrant today.

BAY-BREASTED WARBLER. *Deudroica castanea*. Mr. Lundquist first observed this bird for the region in 1927.

BLACK-POLL WARBLER. *Dendroica striata.*\* Still one of the more common migrants of the warbler hosts.

PINE WARBLER. *Dendroica pinus*.\* The Pinc Warbler was found in small numbers by McChesney.

PALM WARBLER. Deudroica palmarum. This species has been seen by Mr. Lundquist.

OVENBIRD. Seiurus aurocapillus.° Dr. McChesney does not list this species. Recently Mr. Lundquist has found the bird as common in migration. The writer has found that it breeds sparingly in this region.

WATER-THRUSH. Seiurus noveboracensis.\* Dr. McChesney found this species as rare in 1878, it is however a regular migrant.

YELLOW-THROAT. *Geothlypis trichas.*\*° Dr. McChesney found the Yellow-throat as a migrant; today, however, it is a common summer resident in suitable locations.

YELLOW-BREASTED CHAT. Icteria virens.<sup>o</sup> During June. 1935. the writer found the Yellow-breasted Chat not uncommon in suitable habitats and now considers this species as a regular summer resident on the Coteau.

WILSON'S WARBLER. Wilsonia pusilla. An uncommon migrant on the Coteau.

CANADA WARBLER. *Wilsonia canadensis.*\* Dr. McChesney found this bird in some numbers, but it did not stay to breed.

AMERICAN REDSRART. Setophaga ruticilla.\*° Still a regular migrant through the region with a few remaining to breed in the more timbered parts of the Coteau.

ENGLISH SPARROW. *Passer domesticus.*<sup>o</sup> An introduced species. which, happily. Dr. McChesney did not have to bother with on his field trips. This bird is at present very common around the remains of the old post.

BOBOLINK. Dolichouyx oryzivorus.<sup>\*°</sup> In 1878 this bird was very common about Fort Sisseton. At this writing it can hardly be said that the Bobolink is eommon. The bird is still found in certain meadows, but not in great numbers and seems to be one of the birds which is slowly decreasing in numbers.

WESTERN MEADOWLARK. Sturnella neglecta.\*° A very common bird in the past and even more common in the present. It often stays in the region until along in November.

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Fig. 31. View in Double-crested Cormorant colony on East Island in South Waubay Lake.



FIG. 32. Adult Cormorants in the same colony. Photograph by W. F. Kubichek, and borrowed from Wilson Bulletin, December, 1932.

YELLOW-HEADED BLACKBIRD. Xanthocephalus xanthocephalus.\*<sup>o</sup> The most abundant bird around the numerous sloughs of the region. They are found feeding everywhere in pastures and fields and are almost confiding in nature. Many were caught by Professor Kubichek while he sat in his blind waiting for Western Grebes to perform. The birds would sit on the corner posts of the blind, and by cutting a slit in the burlap and quickly thrusting up a hand, the birds could be grasped by the legs.

RED-WINGED BLACKBIRD. Agelaius phoeniceus.\*° The Red-winged Blackbird is also a common summer resident about Fort Sisseton.,

ORCHARD ORIOLE. *Icterus spurius.*\*<sup>o</sup> This fine songster is a regular summer resident in this area and is another of the birds which has increased in numbers due to planting of trees about farms and towns.

BALTIMORE ORIOLE. *Icterus galbula.*\*<sup>o</sup> The Baltimore Oriole is not uncommon over the entire region and has increased greatly in numbers due to the settlement of the country.

RUSTY BLACKBIRD. *Euphagus carolinus*. A common migrant. not mentioned by Dr. McChesney in his report.

BREWER'S BLACKBIRD. *Euphagus cyanocephalus*.<sup>o</sup> This most interesting blackbird has come into the Fort Sisseton country in recent years, as it was not found by Dr. McChesney. It has recently been found nesting in small numbers in favored localities and specimens have been taken.

BRONZED GRACKLE. Quiscalus quiscula.\*° Dr. McChesney puts this species down as the Purple Grackle. The grackle has also increased in numbers in recent years.

COWBIRD. *Molothrus ater.*\*° This foister of the bird family is still a very common species about Fort Sisseton.

CARDINAL. Richmondena cardinalis.\*° Many birds have expanded or contracted their breeding ranges in recent years, viz.. Brewer's Blackbird, Arkansas Kingbird, and others. Most people in the upper Missouri Valley, however, think that the Cardinal is a recent addition to the fauna of the region. This is hardly the case, for Dr. McChesney found this bird on several occasions in the woods about Fort Sisseton, back in 1877, and although he called it casual, it meant that the species was present more than fifty years ago.

ROSE-BREASTED GROSBEAK. *Hedymeles ludovicianus.*\*° The strikingly attired male grosbeak is a welcome addition to the bird life of the Coteau. From my observations, however, it is found only in small numbers and is not increasing in abundance.

INDIGO BUNTING. *Passerina cyanea.*\*° Another bird with a tropical touch is the Indigo Bunting, which is found in small numbers.

LAZULI BUNTING. *Passerina amoena*. Every day during the first week of June, 1935, the writer found Lazuli Buntings near the camp on Hildebrandt's Lake. The birds were apparently beginning nidification. The presence of this species in the Fort Sisseton region indicates the eastward movement of another western species.

DICKCISSEL. Spiza americana.\*° Dr. McChesney found the Blackthroated Bunting in considerable numbers during the summer time. In recent years it has not been very noticeable around that region, but this is probably due to the fact that it is another species like the Lark Bunting, which seems to fluctuate at intervals as to abundance.

PINE GROSBEAK. *Pinicola enucleator.*\* In Dr. McChesncy's long list this species was merely mentioned. But later he reported (*Bull. Nutt. Ornith. Club*, IV, 1879, p. 187) encountering a flock of "perhaps twenty-five birds" on January 6, 1879. in some timber growth. A single specimen was secured.

REDPOLL. Acanthis linaria.\* This species was also merely mentioned by Dr. McChesney in his first report. But hc gave the details in a later note (*Bull. Nutt. Ornith. Club*, IV. 1879, p. 187). During the winter of 1878-79 many flocks were seen, and a specimen was secured on January 28. Mr. Lundquist found this species to be common during the winter of 1931-32.

PINE SISKIN. Spinus pinus. The very erratic little Pinc Finch is found at odd times in the Fort Sisseton country: it was not mentioned by Dr. McChesney.

GOLDFINCH. Spinus tristis.\*° The Goldfinch is a common bird and often comes into the town gardens to drink and bathe in a conveniently placed bird bath.

TOWHEE. *Pipilo erythrophthalmus*. A migrant and I believe that a few stay to nest in the secluded glens on the Coteau.

ARCTIC TOWHEE. *Pipilo maculatus arcticus*. This form is also a regular migrant and is found migrating much later in the fall than the preceding form. These two species were not cutered by Dr. McChesney.

LARK BUNTING. Calamospiza melanocorys.\*<sup>o</sup> The Lark Bunting is here one year and gone the next. In 1929 the birds were not uncommon, but in 1931 only one bird was seen.

SAVANNAH SPARROW. *Passerculus sandwichensis.*\*• This prairie sparrow is common all over the Coteau and its thin song is heard on every side. Dr. McChesney did not think it bred in the vicinity, but

the nest of the Savannah Sparrow has been found here and also one hundred miles south of this region.

GRASSHOPPER SPARROW. Ammodramus savannarum.<sup>o</sup> The Grasshopper Sparrow, which has less of a song than the preceding bird was overlooked by Dr. McChesncy. It is common and can be found most everywhere.

SHARP-TAILED SPARROW. Ammospiza caudacuta.<sup>o</sup> A very elusive bird which was not reported by Dr. McChesney. A male bird was collected by the writer at Rush Lake on June 7, 1931, and was without a doubt a breeding bird. The Sharp-tailed Sparrow of this region is also called the Nelson's Sparrow.

VESPER SPARROW. *Pooecetes gramineus.*\*<sup>o</sup> A common summer bird at present and reported by McChesney during the winter of 1877-78.

LARK SPARROW. *Chondestes grammacus*.<sup>o</sup> The Lark Sparrow is not a common bird in this region. It was not given in Dr. McChesney's list.

SLATE-COLORED JUNCO. Junco hyemalis.\* The junco was found as a regular winter visitor by Dr. McChesney.

TREE SPARROW. Spizella arborea.\* Dr. McChesney tells of the abundance of this sparrow and considers it a breeding bird. I think he must have confused it with the Chipping Sparrow, as the Tree Sparrow has never been known to nest either in North Dakota or Minnesota, where it would be more apt to nest than in South Dakota.

CHIPPING SPARROW. Spizella passerina.<sup>o</sup> An uncommon summer resident.

CLAY-COLORED SPARROW. Spizella pallida.\*° Dr. McChesney said that this sparrow was extremely rare in 1878. The writer has found this most interesting sparrow not uncommon in many places on the Coteau. Scattered patches of snowberry seem to be its favorite nesting place. The male usually seeks some small tree nearby for his singing periods. Most of the dainty nests were found within a few inches of the ground. Occasionally a nest would be up a foot or two in some small bush.

HARRIS'S SPARROW. Zonotrichia querula.\* One of our most handsome sparrows and a common migrant over the Coteau. Dr. McChesney called it an accidental bird, but in recent years it has been found as common. especially during September and October.

WHITE-CROWNED SPARROW. Zonotrichia leucophrys. This species was not mentioned by Dr. McChesney. This bird along with Gambel's Sparrow is a regular migrant at this writing.

WHITE-THROATED SPARROW. Zonotrichia albicollis. This crown sparrow was not given by Dr. McChesney in his list. It is now found as a common spring and fall migrant.

Fox SPARROW. *Passerella iliaca*. The large Fox Sparrow is a migrant in small numbers in the Fort Sisseton region. Dr. McChesney did not report this species.

LINCOLN'S SPARROW. *Melospiza lincolni*. A rather silent migrant during its stay with us and although usually common, it is often not seen because of its shyness. Not given by Dr. McChesney.

SWAMP SPARROW. *Melospiza georgiana*.<sup>\*•</sup> Dr. McChesney colleeted a single bird in the spring of 1878. This sparrow is a regular migrant and the writer is inclined to believe that a few remain to nest. as he has found birds nesting in western Minnesota in similar habitat as offered by the Fort Sisseton region.

SONG SPARROW. Melospiza melodia.\*° As in the ease of the Savannah Sparrow, this sparrow was also considered as a migrant by Dr. McChesney, but now the two species are both found as breeding birds. The long wooded island in Rush Lake was found to be the home of more than one pair of Song Sparrows during the writer's trips to that spot.

LAPLAND LONGSPUR. *Calcarius lapponicus.*\* This migrating longspur was found by Dr. McChesney as abundant. The bird still comes in large numbers and is observed oceasionally in the fall in flocks of thousands.

SMITH'S LONGSPUR. Calcarius pictus.\* Dr. McChesney saw great flocks of these birds in the fall. He adds that for a period of about two hours, he estimated that one thousand birds passed him per minute and that when he left the birds were still flying southward. This species has suffered a tremendous loss in numbers if present day observations are accurate. There are no recent reports of the species from the Fort Sisseton country and very meager reports from Minnesota in the last twenty years. Mr. Chas. J. Spiker's report of Smith's Longspurs in "Winter Bird Records, 1922 to 1926, in Northwestern Iowa" (*Proceedings of the Iowa Academy of Science*, XXXIII, 1926, pp. 307-313), seems to be the only recent record of the birds in this region.

CHESTNUT-COLLARED LONGSPUR. *Calcarius ornatus.*\* This well marked species was considered as merely a migrant by Dr. McChesney. who found it in large numbers. At the present time this longspur is a regular breeding bird on the prairies of northeastern South Dakota.

SHOUX CITY, IOWA.